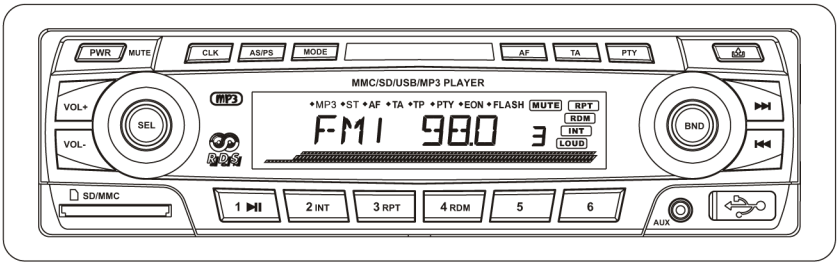
CALIBER
AUDIO TECHNOLOGY

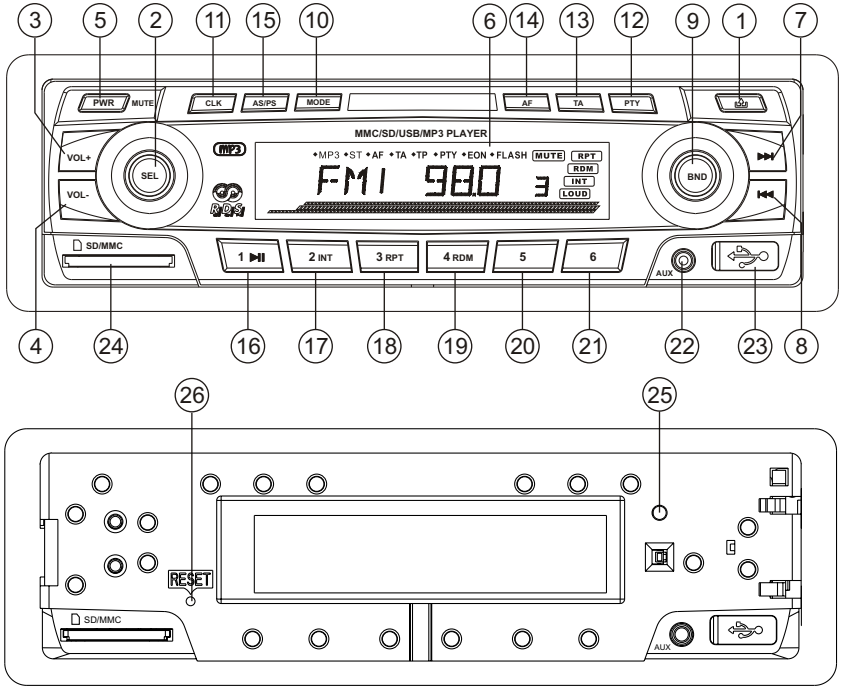
MCD068

INSTRUCTION MANUAL



AM/FM DIGITAL PLL TUNING RADIO
SD/MMC/ USB/MP3/WMA PLAYER

LOCATION AND FUNCTION OF CONTROLS



1. RELEASE BUTTON

Press the REL button to release the front control panel from the unit chassis, then pull it up a little to remove from the unit chassis.

When the front control panel is removed the LED indicator flashes.

2&3&4. SEL BUTTON (Select) AND VOL CONTROL BUTTON

a) Press the SEL button briefly, it is activated as selecting each mode of E. VOL.
-> VOLUME ->BASS ->TREBLE -> BALANCE -> FADER ->

When selecting a desired audio mode, press the VOL+ or VOL- button to adjust the audio effect.

In each mode, the waiting time is about 5 seconds, and the time waiting time is over, it returns to the last display mode .

The control mode of E.VOL is operated with following numeric display.

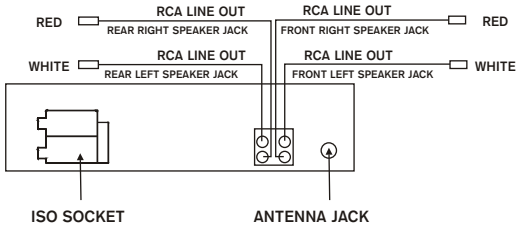
- VOL: (MIN)00, 01,.....46, 47(MAX).
- BASS/TRE: -07, -06,...,00,...+06,+07
- BAL: 0LR9, 1LR9, ..., 9LR9,..., 9LR1, 9LR0
- FAD: 0FR9,1FR9, ..., 9FR9,..., 9FR1, 9FR0

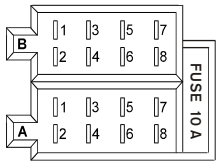
b) Press SEL button and hold for more than 2 seconds to turn on TA SEEK/ TA ALARM mode, then press SEL button shortly and repeatedly to select PI SOUND/PI MUTE, RETUNE L/RETUNE S, MASK DPI/MASK ALL, BEEP ON/ BEEP OFF, USER SET (FLAT/CLASSIC/ROCK/POP),VOL LAST/VOL DEFA , STEREO/MONO(in RADIO mode), LOUD OFF/LOUD ON,DX/LOCAL (in RADIO

SPECIFICATION

GENERAL	
Supply Voltage	DC 12V. Negative Ground
Current Consumption	Max.10A
Power Output	25Watts X 4 (Measured at DC 14.4 V)
Number of channels	2 STEREO channels.
Unit Dimensions	178[W] X 101.5[D] X 50[H] mm.
FM SECTION	
Frequency range	87.5MHz - 108.0MHz
Effective sensitivity	3uV.
I.F Frequency	10.7MHz.
AM SECTION	
Frequency range	522KHz - 1620KHz
Effective sensitivity	40dB.
I.F Frequency	450KHz
RCA LINE OUT	
Output	1200mV @ MAX.
MMC/SD or USB PLAYBACK	
System	MP3 audio system.
Frequency characteristics	20Hz -100Hz <=5dB
	10KHz-20KHz <=5dB.
Signal to noise (MMC/SD & USB)	50dB [1KHz] .

WIRES CONNECTION





ISO SOCKET SKETCH

CONNECTOR A

1.
2.
3.
4. Memory +12V
5. Auto Antenna Output
6.
7. 12V (To Ignition Key)
8. GROUND

CONNECTOR B

1. Rear Right Speaker (+)
2. Rear Right Speaker (-)
3. Front Right Speaker (+)
4. Front Right Speaker (-)
5. Front Left Speaker (+)
6. Front Left Speaker (-)
7. Rear Left Speaker (+)
8. Rear Left Speaker (-)

mode), CLK ON/CLK OFF, CLK 12/24 mode. After selecting the desired mode, press the VOL- or VOL+ button to select one setup item of the desired mode.

1) TA SEEK/TA ALARM:

TA SEEK mode: when newly tuned station does not receive TP information for 5 seconds, the radio retunes to next station which has not the same station (PI) as the last station, but has the TP information.

When TP information gets lost at the current station for retune time which is set by RETUNE SHORT(90 seconds) or RETUNE LONG(150 seconds), the radio start to retune to next same PI station. When same PI station does not catch in 1 cyclic search, the radio retunes to next station with TP information.

TA ALARM mode: when this mode is selected, any automatic retune mode is not activated. Only double beep sound(ALARM) is out-put.

When newly tuned station does not have TP information for 5 seconds, beeps come out.

When TP information gets lost at the current station for retune time, the beep sound is out-putted.

When newly tuned station has not RDS signal, PI SEEK is suppressed somewhat

.

2) PI SOUND/ PI MUTE:

PI SOUND mode: if a car cruises that critical area back and forth, an oscillation phenome-non can be occurred, because the different PI code can be receive from a same AF. when the different PI sound (DIP) is heard once in a while, the different PI sound will be heard for less than 1 second.

PI MUTE mode: under above same situation, a mute sound will be heard for less than1second.

3) RETUNE L / RETUNE S:

The initial time of automatic TA search or PI SEARCH mode is selected.

When PI information is not caught for retune time , the radio start to retune to next same PI station.

When same PI station does not catch 1 cyclic search, the radio goes to last station and waits for 4-5 minutes until PI code is received.

RETUNE L mode: selected as 150 seconds.

RETUNE S mode: selected as 90 seconds.

4) MASK DPI/MASK ALL:

MASK DPI mode: masked only the AF which has different PI.

MASK ALL mode: masked the AF which has different PI and NO RDS signal with high field strength.

5)BEEP ON/BEEP OFF

BEEP ON mode: The beep is generated when any key is pressed.

BEEP OFF mode: The beep sound is disabled.

6) VOL LAST/VOL DEFA

VOL LAST: The radio switches on at the actual volume it had when it was last switched off.

VOL DEFA: After pressing SEL button, AVOL will be displayed. Then you can pre-select a constant switch-on volume by using the VOL knob.

7)CLK ON/OFF

CLK ON: Clock will always show on the display when power off.

CLK OFF: Clock will disappear on the display when power off.

5. POWER ON/OFF & MUTE

When the unit is power off, the unit comes to on by pressing any button except the EJECT and the RELEASE button.

When the unit is power on, press and hold the power button for more than 0.5 seconds, the unit goes into power off mode.

When the unit is power on, press the power to switch the MUTE state on/off.

6. LCD Display

7&8. TUNE, SEEK, TRACK, SKIP UP / DOWN BUTTONS

a) During RADIO mode:

Press the >>| or |<< button briefly to manual tune up/down for the desired radio station frequency step by step.

Press and hold the >>| or |<< button for longer 0.5 seconds, to automatically tune up/down for the radio station frequency of strong signal.

b) During SD/MMC & USB mode:

Press the >>| button briefly to play next track.

Press the |<< button briefly to play the current track from the beginning of it if the playing time is more than 2 seconds.

Press the |<< button briefly to play the previous track if the playing time is less than 2 seconds.

9. BAND BUTTON

During radio mode, press the BND button briefly to select the radio broadcasting band you would like to hear. The AM/FM band is toggled cyclically through the tuning bands: ->FM 1-> FM 2 -> FM 3 -> MW 1->MW 2 ->.

In MMC/SD, USB mode, if you press BAND button repeatedly, the file name, folder name, song's title, artist and album information will be scrolling on the LCD display.

As long as the current playing MP3/WMA music contains relevant ID3 tag information in version 1.0/2.0 format, the 3 items underlined above will be scrolling on the LCD
display; otherwise, they will not.

10. MODE BUTTON

Press it to select RADIO, CARD(after inserting MMC/SD card), USB(after inserting USB stick) and AUX mode.

11. CLOCK BUTTON

Press the CLK button briefly to display time for 5 seconds on the display, and then returns to its previous display unless the button is pressed again.

Then press the CLK button and hold for more than 1 seconds until the real time flashes on the display. Then you can adjust HOUR or MINUTE by press the VOL- or VOL+ button .

12. PTY (PROGRAM TYPE) BUTTON

Press it briefly and repeatedly to select one of the following mode:

POP M-- NEWS

While selecting PTY TYPE, its selection is implemented by preset buttons as described in preset key. (press one of the 6 preset buttons shortly and repeatedly to select the PTY TYPE in the preset button) When POP M or NEWS

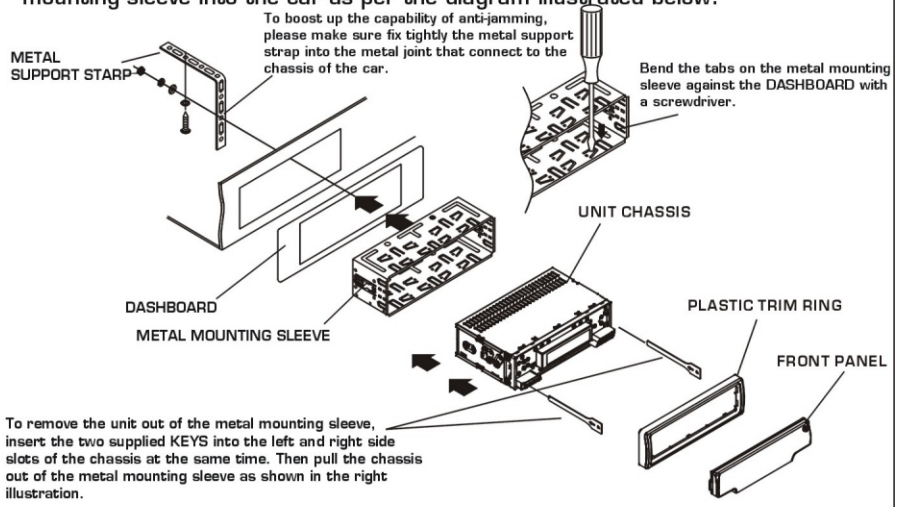
TROUBLE SHOOTING

Before using the check list please make all the connections first.
If you still have questions after going through the checklist, please consult your local customer service representative.

Common Symptoms	Cause	Solution
There is no power.	The car ignition is switched off.	If the power supply is properly connected to the car accessory, switch the ignition key to " ON " or " ACC " .
	The fuse has blown.	Replace another fuse according to the wiring diagram.
There is no sound.	The volume control is set too low.	Turn up the volume properly.
	The device has not been correctly connected.	Check the power and earth connection according to the wiring diagram.
The operation keys do not work	The built-in microcomputer is not operating properly due to noise	Switch the device off and on again. Or press the RESET button to resume the program.
No radio reception.	The antenna cable is not connected.	Insert the antenna cable firmly into the antenna socket of the device.
In automatic search mode the radio does not stop at a transmitting station.	The transmission signals are too weak.	Tune in to a radio station manually.

INSTALLATION METHOD

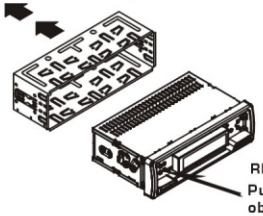
This is an anti-theft installation method.
The main unit wears a METAL MOUNTING SLEEVE.
Please connect the wiring, eg, the Power Supply, the Speakers and the Antenna according to the requirements of this Instruction Manual, then install the metal mounting sleeve into the car as per the diagram illustrated below.

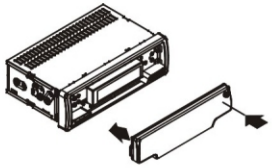

To boost up the capability of anti-jamming, please make sure fix tightly the metal support strap into the metal joint that connect to the chassis of the car.
METAL SUPPORT STARP
Bend the tabs on the metal mounting sleeve against the DASHBOARD with a screwdriver.
UNIT CHASSIS
DASHBOARD
METAL MOUNTING SLEEVE
PLASTIC TRIM RING
FRONT PANEL

To remove the unit out of the metal mounting sleeve, insert the two supplied KEYS into the left and right side slots of the chassis at the same time. Then pull the chassis out of the metal mounting sleeve as shown in the right illustration.

NOTE

Before mounting and operating the player, remove the metal mounting sleeve illustrated by the arrows.

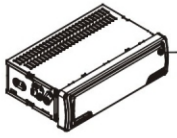




To attach the removable faceplate, insert the left side of the faceplate into the left of the chassis first. Then push the right side of the faceplate into the chassis until you hear it "click".

RESET BUTTON

Push this reset button with a cuspidal object to renovate the distorted program once the program is distorted.



To remove the front panel from the unit chassis, press this key to release the front panel from the unit chassis, then pull it up a little to take out from the unit chassis.

is on, the previous PTY program and PTY word is displayed on LCD. If there are no keys entered for 2 seconds, previously selected PTY is searched. During 1 loop, if desired PTY is not found, NO PTY is flashed, then return to previous normal radio and PTY word disappear.

13. TA [TRAFFIC ANNOUNCEMENT] BUTTON

When press the button, it is activated as TA mode on or off.
When TA mode is on(TA is displayed on LCD), it will begin to seek TA station and TA SEEK will be displayed on LCD for a while.
When traffic announcement is transmitted:

1). If the unit is in MMC/SD, USB mode, it will switch to radio mode temporarily.
2). If volume level is below 20, volume level is raised to 20, and returns to its previous mode and volume level when the traffic announcement is over. If volume is adjusted during traffic announcement, only the traffic announcement volume is valid.

* TA interruption function:
The current traffic announcement is cancelled by pressing this key. But the TA mode will not be off.

* When TA is on, SEEK, (SCAN), AUTO MEMORY function can be received or saved only when traffic program identification code has been received. When TA is ON, traffic program identification code is not received during specified time.

14. AF [ALTERNATIVE FREQUENCIES] BUTTON

When pressed briefly , AF switching mode is selected and the state of AF switching mode is displayed by AF segment in display.
Segment off: AF switching mode off.
Segment on: AF switching mode on, and has RDS information.
Segment flashing: AF switching mode on, but RDS information is not received yet.
When AF switching mode is selected, the radio checks the signal strength of AF all the time. The interval of checking time of each AFs depends on the signal strength of current station, from a few minute for strong station to a few seconds for weak station.
Every time that new AF is stronger than current station, it switches over to that frequency for very short time, and NEW FREQUENCY is displayed for 1-2 second. Because the mute time of AF switching or checking time is very short, it is almost inaudible in case of normal program.
During FM mode, when AF is on, SEEK, (SCAN), AUTO-MEMORY function can only receive and save RDS program.

15. AS/PS BUTTON (Auto-storage /Preset scan)

During radio mode:

1) When press and hold for more than 1 second, the radio searches from the current frequency and checks the signal strength level until 6 station are found. And then the 6 stations frequency are preset to the corresponding preset memory numbered bank. The auto-storage operation is implemented in the each selected band. When the auto-storage operation is finished, the radio execute the Preset scan.

2) When briefly pressing, the radio searches for each preset station in the current band and holds at that preset number for 5 seconds with releasing mute, and then search again.
During SD/MMC or USB mode:
Press the AS/PS button briefly, it is activated selecting TRACK SEARCH mode:
In TRACK SEARCH mode, the LCD will display TRK T 000 and flash the biggest digit 0 that the SD/MMC card or USBstick contain.
Then press the VOL+ or VOL- button to select the number of the flashing digit from 0 ~ 9. Then press BND button to confirm the number and flash next smaller digit 0.
With the same means, select the number of the flashing digit. After finishing selecting the number of all flashing digit, press BND button to play the track of the selected serial number.

16-21. PRESET STATION MEMORY AND TOP/>II, INT, RPT, RDM BUTTONS

a) During radio mode:
When pressed briefly, these buttons select a preset station directly. If the six buttons are pressed for more than 2 seconds, the station currently being listened to is memorized into the selected preset button.

b) During SD/MMC or USB mode:
Press the TOP/>II button briefly to interrupt the playback of the SD/MMC card or USB stick.
Press again to resume normal playback.
Press the INT button to play the first 10 seconds part of each track, and the LCD will display INT ON.
Press again to stop scan, while the currently selected track will be played, and the LCD will display INT OFF.
Press the RPT button to play the current track repeatedly, and the LCD will display RPT ONE.
Press again to cancel this function, and the LCD will display RPT OFF.
Press the RPT button twice continuously to play the tracks in the current folder repeatedly and the LCD display will show RPT ABM.
Press the RDM button to play all tracks in random order, and the LCD will display RDM ON.
Press again to cancel this function, and the LCD will display RDM OFF.
Press the radio preset button 6 and 5 button to move up and down10 tracks at a time.
When the remained total tracks is lack of 10, the both buttons are inactively.

22. AUX INPUT JACK
Press the mode button to select auxiliary input playing mode. You can connect any matched external audio device to the auxiliary input jack. Use the volume control to adjust volume.

23. USB SOCKET
When needing to play the file in the USB stick, insert the USB stick into the USB socket. The system will change into the USB mode automatically, and then play the first file in the USB.

24. MMC/SD CARD SLOT
When you need to play the file in the MMC/SD card, insert the MMC/SD card into the MMC/SD card slot. The system will change into the MMC/SD mode automatically, and then play the first file in the MMC/SD.
Note:
When MMC/SD card and USB stick are both inserted into their slot or socket, the system will change into the playback mode of the latter one.

25. FLASHING LED
When the front control panel is removed this indicator flashes.

26. RESET BUTTON
Before operating the unit for the first time, or after replacing the car battery or changing the connections. You must reset the unit.
Press this button with a cuspidal object. This operation will erase the clock setting and some stored contents.